- 1. Consider the following statements.
 - 1. The expansion created by the 'Big Bang' continues even to the present day.
 - 2. Soon after the Big Bang, the Universe became highly opaque and temperatures started rising till the atmosphere was formed.

Which of the above is/are correct?

a) 1 only	b) 2 only
c) Both 1 and 2	d) None

2. Only one side of the moon is visible to us on the earth mainly due to

- a) Rotational velocity of the Moon
- b) Geoid shape and axial tilt of the earth
- c) Atmospheric refraction
- d) The other side of the Moon does not reflect any sunlight
- 3. What do the rings around Jupiter, Saturn and Uranus largely contain?
 - a) White dwarf flux
 - b) Icy dust, large rocks and moons of the planets
 - c) Comets and asteroids only
 - d) Satellites of these planets only
- 4. Consider the following about the solar system.
 - 1. Mercury, Venus and Mars do not have satellites of their own.
 - 2. Venus can be seen in the sky only during sunset.
 - 3. Density of planet Saturn is less than that of water.

Select the correct answer using the codes below.

- a) 1 and 2 only
- c) 3 only

b) 2 and 3 only d) 1 only

a) i only

5. Which of these planets takes the longest time to complete one spin or rotation on its own axis?

a) Jupiter	b) Mercury
c) Saturn	d) Venus

6. If the earth starts rotating east to west, which of the following shall be correct?

- 1. Places West of Greenwich will be behind the Greenwich Time.
- 2. Places located on the same longitude northwards will be ahead in time than those located southwards.
- Which of the above is/are correct?

a) 1 only	b) 2 only
c) Both 1 and 2	d) None

7. Which of these are of equal lengths?	
a) All parallels of latitude	b) All meridians
c) All isotherms drawn on earth	d) All isobars drawn on earth

8. Which of these water bodies witnesses sun rise at the earliest (as per GMT system)?

a) North Sea	b) Black Sea
c) Caspian Sea	d) Arabian Sea

9. Consider the following statements.

- 1. The distance between two longitudes increases going towards the equator from the poles.
- 2. The distance between two latitudes increases towards the poles going from the equator. Which of the above is/are correct?

a) 1 only	b) 2 only
c) Both 1 and 2	d) None

10. The Indian plate borders

- 1. Somail Plate
- 2. Arabian Plate
- 3. Australian Plate
- Which of the above is/are correct?

a) 1, 2 and 3	b) 2 and 3 only
c) 1 and 3 only	d) 2 only

11. Consider the following statements about Sea floor spreading.

- 1. It is caused by a sinking mantle.
- 2. It is verified by the observation that ocean crust rocks are much younger than the continental rocks.

3. The sediments on the ocean floor get unexpectedly very thick due to sea floor spreading. Select the correct answer using the codes below.

a) 1 and 2 only	b) 2 and 3 only
c) 1 and 3 only	d) 2 only

12. Consider the following statements.

- 1. Mid-Atlantic ridge is an example of convergent boundary.
- 2. A subduction zone cannot be formed between an Oceanic and a continental plate.
- 3. Transform faults are the planes of separation generally perpendicular to the mid-oceanic ridges.

Select the correct answer using the codes below.

a) 3 only	b) 1 only
c) 1 and 2 only	d) 1 and 3 only

13. Consider the following statements.

- 1. Lithospheric plates carry both continents and ocean floor.
- 2. Lithospheric plates are prone to movement because of movement of molten magma inside the earth.

Which of the above is/are correct?

a) 1 only	b) 2 only
c) Both 1 and 2	d) None

14. What evidence is proposed in support of the Continental Drift Theory?

- 1. Jigsaw fit of the coastlines on either side of the Southern Atlantic Ocean
- 2. Belt of ancient rocks of from Brazil coast matches with those from western Africa
- 3. Occurrence of rich placer deposits of gold in the Ghana coast and the absence of any such source rock there

Select the correct answer using the codes below.

a) 1 only	b) 2 and 3 only
c) 1 and 2 only	d) 1, 2 and 3

15. Poles experience about six months day and six months night due to which of the following?

- 1. Axial Tilt of earth
- 2. Coriolis Force
- 3. Revolution of Earth around the Sun

Select the correct answer using the codes below.

 a) 1 and 2 only
 b) 2 and 3 only

 c) 1 and 3 only
 d) 1 only

16. Which of these continents form a mirror image and zig saw puzzle of each other?

- a) South America and Africa b) Europe and Asia
- c) Africa and Asia

d) North America and South America

17. Wegener suggested that the movement responsible for the drifting of the continents was caused by

1. Pole-fleeing force	2. Tidal force
Which of the above is/are correct?	
a) 1 only	b) 2 only
c) Both 1 and 2	d) None
18. The thinnest of all layers on earth is	
a) Crust	b) Upper Mantle
c) Lower mantle	d) Core

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19. About 98 per cent of the total crust of the earth is composed of eight elements. These eight elements most likely do NOT include

a) Oxygen	b) Carbon
c) Silicon	d) Iron

20. Which of the following can be classified as endogenic geomorphic processes?

1. Weathering	2. Wind Erosion and deposition	
3. Diastrophism	4. Volcanism	
Select the correct answer using the codes below.		
a) 1 and 2 only	b) 2, 3 and 4 only	
c) 3 and 4 only	d) 1 and 4 only	

21. Consider the following statements.

- 1. In the process of orogeny, the crust is severely deformed into folds and thus it is called as a mountain building process.
- 2. Due to epeirogeny, there may be a simple deformation in the crust and thus it is called as a continental building process.

Select the correct answer using the codes below.

a) 1 only	b) 2 only
c) Both 1 and 2	d) None of the above
22. Weathering of rocks can be caused by	
22. Weathering of focks can be caused by	

1. Seepage of water	2. Thermal stresses
3. Plant root penetration in rocks	4. Frost action
Select the correct answer using the codes below.	
a) 2 and 3 only	b) 1 and 4 only
c) 2, 3 and 4 only	d) 1, 2, 3 and 4

23. Crescent-shaped oxbow lakes form in river valleys mainly as a result of

a) Tectonic movementsb) Glacial depositionc) Meandering and river depositiond) Volcanic activity

24. Factors that help in the evolution of landforms on earth include

1. Movement of magma within the earth	2. Growth and decay of vegetation
3. Erosion and deposition	4. Frost action and glacial movement
Select the correct answer using the codes below.	
a) 1 and 3 only	b) 2 and 4 only
c) 1, 3 and 4 only	d) 1, 2, 3 and 4

25. Alluvial fans are formed when

1. Streams flowing from higher levels break into foot slope plains of low gradient

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- 2. The river does not carry much load or carries only fine sediments
- 3. A river is nearing the sea

Select the correct answer using the codes below.

a) 1 onlyb) 1 and 2 onlyc) 2 and 3 onlyd) 3 only

26. Lagoons can be formed in

- 1. High rocky coasts
- 2. Low sedimentary coasts Which of the above is/are correct?

a) 1 only	b) 2 only
c) Both 1 and 2	d) None

27. With reference to Loess, consider the following statements.

- 1. It can be created by wind as well as movement by glaciers.
- 2. It mostly tends to accumulate at the edges of coasts.
- 3. It is devoid of mineral deposits.

4. It is the fastest eroding soil deposit among all different types of soil.

Select the correct answer using the codes below.

a) 1 only	b) 1, 2 and 4 only
c) 2 and 3 only	d) 1, 2 and 3 only

28. Meanders are most likely to be formed in which of the following stages of the river?

- a) Youth stage
- b) Mature stage
- c) Old Stage
- d) They are equally likely to be formed in all three stages.
- 29. Consider the following about Glaciers.
 - 1. Glacial retreat can result in the creation of a lake.
 - 2. Materials deposited by a retreating glacier results in glacial moraines.

Which of the above is/are correct?

a) 1 only	b) 2 only
c) Both 1 and 2	d) None

30. Peninsula is

- a) A land surrounded by water from all the sides
- b) A water body surrounded by land from three sides
- c) A land surrounded by water from three sides
- d) A gulf connected to large water body

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GEOGRAPHY (Solar System to Landforms)

 31. Which of the following is/are example(s) of organ 1. Limestone 3. Basalt Select the correct answer using the codes below. a) 1 and 2 aphy 	2. Coal 4. Shale
a) 1 and 2 only	b) 1, 2 and 4 only
c) 1, 2 and 3 only	d) 3 and 4 only
 32. Consider the following statements. 1. Basalt in an example of an intrusive igneous 2. Igneous and sedimentary rocks can change in pressure, but metamorphic rocks cannot chat 3. Granite rocks were formed due to cooling do Select the correct answer using the codes below. 	into metamorphic rocks under great heat and ange into either of them.
a) 1 only	b) None of the above
c) 3 only	d) 2 and 3 only
33. Which one of the following is NOT a single eleme a) Gold c) Silver	ent mineral? b) Mica d) Graphite
34. Nearly half of the earth's crust is composed of	
a) Feldspar	b) Mica
c) Quartz	d) Granite
35. Which one of the following is a salient feature of	metamorphic rocks?
a) Low melting point	b) Lustre
c) Crystalline	d) Foliation
36. Minerals on earth mainly come from a) Magma c) Meteoroids	b) Fossils d) Both (a) and (b)
 37. Consider the following about the Dharwar System 1. It is the oldest rock system of India. 2. It is contains metamorphic sedimentary rock 3. It hosts gold mines. Select the correct answer using the codes below. 	s.
a) 1 and 2 only	b) 2 only
c) 1 and 3 only	d) 2 and 3 only

GEOGRAPHY (Solar System to Landforms)

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38. The eastern and western boundaries of the Pacific Ocean experience frequent earthquakes mainly due to

- 1. Their margins coinciding with the plate margins.
- 2. The presence of high mountain stretches along the continental belts

Which of the above is/are correct?

A. 1	only
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C. Both 1 and 2

39. Consider the following statements.

- 1. The expansion created by the "Big Bang" continues even to the present day.
- 2. Soon after the Big Bang, the Universe became highly opaque and temperatures started rising till the atmosphere was formed.

Which of the above is/are correct?

A. 1 only

C. Both 1 and 2

40. Which of the following causes "Sea floor spreading"?

- A. Weight of the ocean bed
- C. Constant volcanic eruptions at the ocean floor
- B. Due to gravitational force

D. None of the above

B. 2 only

B. 2 only

D. None of the above

D. Presence of Seabed methane

41. With reference to the Earthquake Waves, consider the following statements:

- 1. P-waves move faster than S-waves.
- 2. P-waves travel only through solid medium whereas S-waves travel through both solid and liquid medium.
- 3. Love waves and Rayleigh waves are body waves whereas P-waves and S-waves are surface waves.

Which of the statements given above is/are correct?

A. 1 only	B. 1 and 3 only
C. 2 and 3 only	D. None

42. Consider the following statements:

- 1. The size of the parallels of latitude decreases from the Equator towards poles.
- 2. All meridians are of equal length.

Which of the statements given above is/are correct?

A. 1 only	B. 2 only
C. Both 1 and 2	D. Neither 1 nor 2.

43. Consider the following statements:

- 1. Richter scale is used for measuring the intensity of Earthquake.
- 2. Mercalli scale is used for measuring the magnitude of Earthquake.
- 3. The range of intensity scale is from 1-10.

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GEOGRAPHY (Solar System to Landforms)

Which of the statements given above is/are correct?

A. 1	and 2	only
------	-------	------

C. 1, 2 and 3

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44. With reference to the intrusive volcanic landforms, consider the following statements:

- 1. Batholiths are the cooled portion of magma chambers.
- 2. Dykes are the near horizontal bodies of the intrusive igneous rocks.
- 3. Phacoliths are wavy mass of intrusive rocks.

Which of the statements given above is/are correct?

A. 1 and 3 only

B. 2 and 3 only

B. 3 only

D. None

C. 1, 2 and 3

D. 1 and 2 only

45. With reference to the 'Continental Drift Theory' proposed by Alfred Wegener, consider the following statements:

- 1. In the beginning, all the continents formed a single continental mass called Laurasia.
- 2. The movement responsible for the drifting of the continents was caused by pole-fleeing force and tidal force.

Which of the statements given above is/are correct?

A. 1 only	B. 2 only
C. Both 1 and 2	D. Neither 1 nor 2

46. Consider the following statements:

- 1. Convection currents are generated due to radioactive elements causing thermal differences in the mantle portion.
- 2. The ocean crust rocks are much older than the continental rocks.
- 3. In the mid-oceanic ridge areas, the earthquake foci have shallow depths.

Which of the statements given above is/are correct?

A. 1 only	B. 2 and 3 only
C. 1, 2 and 3	D. 1 and 3 only

47. Arid landforms are caused by which of the following factors?

1. Insufficient rainfall		2. High temperatures	
3. High Humidity		4. Rapid rate of evaporation	
Select the correct answer from the following codes			
a. Only 4	b. Only 1 and 2	c. Only 2, 3 and 4	d. 1, 2 and 4

c. Only 1, 3 and 4

48. Which of the following determines rate of erosion of glaciers ?

- 1. Velocity of flow2. Weight of Glacier3. Gradient of Slope4. Geological structure of valley
- Select the correct answer from the following codes

b. Only 1 and 4

a. Only 2 and 3

d.1,2,3 and 4

49. Which of the following is the type of plate boundary of the Indian plate along the Himalayan Mountains?

(a) Ocean-Continent Convergence(b) Divergent Boundary(c) Transform Boundary(d) Continent-Continent Convergence

50. Which of the following were the parts of the Gondwanaland?				
1. South America	2. Antarctica	3. Madagascar	4. India	5. Arabia
Select the correct answer using the code given below:				
(a) 3 and 4 only		(b) 1, 4 and 5 c	only	
(c) 2, 3 and 5 only		(d) 1, 2, 3, 4 an	d 5	

51. Match the following:

Types of Delta	Rivers
A. Estuarine delta	1. Mississippi
B. Bird's-foot delta	2. Nile
C. Arcuate delta	3. Ebro
D. Cuspate delta	4. Amazon
Select the correct answer using the	code given below:
ABCD	А

(a) 4 2 3 1	(b) 4 1 2 3
(c) 2 4 1 3	(d) 3 1 2 4

52. Which of the following statements is/are incorrect regarding Caves formation in Karst Topography?

1. Caves formation is prominent in the areas with alternative bed of Shales and Sandstones rocks.

BCD

2. In areas, where Limestone are dense and occurring as thick beds, cave formation is prominent.

Select the correct answer using the code given below:

(a) 1 only	(b) 2 only
(c) Both 1 and 2	(d) Neither 1 nor 2

53. Which of the following characteristic features of Fluvial Erosional landforms is/are correctly matched?

- 1. **Gorges** They are formed due to active down cutting of the valleys through the mechanism of pothole drilling during young stage of fluvial cycle erosion.
- 2. **Potholes** They are generally formed in coarse-grained rocks such as sandstones and granites.
- 3. Waterfalls They are formed due to variations in the relative resistance of rocks.

Select the correct answer using the code given below:

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	GEOGRAPHY (Solar System to Landforms
(a) 1 only	(b) 2 and 3 only
(c) 3 only	(d) 1, 2 and 3
54. Consider the following	g pairs:
Intrusive Definition Vo	blcanic Form
1. 1. Batholiths	Lava making its way vertically through fissures.
2. 2. Laccoliths	A surface volcanic domes of composite volcano.
3. 3. Dykes	A large body of magmatic material that cools in the deeper depths.
4. 4. Sills	Lava making its way through cracks and the fissures horizontally.
Which of the above pairs	are incorrectly matched?
(a) 1 and 3 only	(b) 2 and 3 only
(c) 1 and 4 only	(d) 1, 2, 3 and 4
Which of the above stater (a) 1, 2 and 3 only (c) 1, 3 and 4 only	(b) 2, 3 and 4 only (d) 1, 2 and 4 only
-	
56. Match the following d	enudational features of deserts with their respective agents:
56. Match the following d Features	enudational features of deserts with their respective agents: Agents
56. Match the following d Features A. Mushroom rocks	enudational features of deserts with their respective agents: Agents 1. Wind deposition
56. Match the following d Features A. Mushroom rocks B. Barchans	enudational features of deserts with their respective agents: Agents 1. Wind deposition 2. Wind erosion
56. Match the following d Features A. Mushroom rocks B. Barchans C. Pediment	enudational features of deserts with their respective agents: Agents 1. Wind deposition 2. Wind erosion 3.Water deposition
56. Match the following d Features A. Mushroom rocks B. Barchans C. Pediment D. Bajada	enudational features of deserts with their respective agents: Agents 1. Wind deposition 2. Wind erosion 3.Water deposition 4. Water erosion
 56. Match the following d Features A. Mushroom rocks B. Barchans C. Pediment D. Bajada Select the correct answer 	enudational features of deserts with their respective agents: Agents 1. Wind deposition 2. Wind erosion 3.Water deposition 4. Water erosion rusing the code given below:
56. Match the following d Features A. Mushroom rocks B. Barchans C. Pediment D. Bajada	enudational features of deserts with their respective agents: Agents 1. Wind deposition 2. Wind erosion 3.Water deposition 4. Water erosion

- 2. Lunar eclipse occur at new moon when the Earth is between the Sun and Moon.
- 3. The moon has elliptical orbit.

Select the correct answer using the code given below:

(a) 1 and 2 only	(b) 1 and 3 only
(c) 1 only	(d) 2 and 3 only